



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,720	11/30/2001	James L. Baggot	KCX-444 (16145)	4084

7590

12/16/2003

John E. Vick, Jr.
Dority & Manning, Attorney at Law, P.A.
P.O. Box 1449
Greenville, SC 29602

EXAMINER

TAWFIK, SAMEH

ART UNIT	PAPER NUMBER
----------	--------------

3721

/0

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/997,720

Applicant(s)

BAGGOT ET AL.

Examiner

Sameh H. Tawfik

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-12 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 13-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-12 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP Imai (0 881 024 A1) in view of Balster et al. (6,038,487).

Imai discloses an apparatus for cutting a web (Fig. 2; via holes H) the apparatus comprising a mechanism for supporting a web (Fig. 1; via rollers 12) the web having a first edge and a second edge, the web being adapted for travel upon the mechanism (Fig. 1); a frame over the web (Fig. 1, via frame 4); at least three lasers mounted upon the frame in an array across the web (Fig. 1, via laser heads 14 on frame 4) such that each successive laser in the array is adapted for providing a light beam upon a corresponding zone of the web (Fig. 2), the lasers being configured for directing a beam of light upon the surface of the web to form at least one severed portion upon the web (Fig. 2; via holes H). Imai does not disclose that the severed portion upon the web in the cross direction. However, Balster discloses a similar apparatus for cutting a web in the cross direction using a laser beams (Figs. 1, 3A, 3B, and 7).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Imai's apparatus for cutting a web by having laser beams in across direction to the web, as taught by Balster, in order to cut a moving web in a direction perpendicular to the direction in which the web is moving (column 1, lines 35-38).

Regarding claims 2-5: Imai does not disclose that severing the web continuously from the first edge to the second edge, form a plurality of severed portion upon the web in interrupted sequence, enabling creation of a perforation line in the cross direction of the web, for multiple perforation lines positioned generally parallel to each other and in the cross direction of the web, nor each laser acts upon only a portion of the cross directional width of the web. However, Balster discloses that severing the web continuously from the first edge to the second edge (Fig. 7, via 48 and 49), form a plurality of severed portion upon the web in interrupted sequence (Fig. 7), enabling creation of a perforation line (49) in the cross direction of the web, for multiple perforation lines positioned generally parallel to each other and in the cross direction of the web (Fig. 7), and each laser acts upon only a portion of the cross directional width of the web (Figs. 4B-5B, via lens 36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Imai's apparatus for cutting a web by laser beams for severing the web continuously from the first edge to the second edge, form a plurality of severed portion upon the web in interrupted sequence, enabling creation of a perforation line in the cross direction of the web for multiple perforation lines positioned generally parallel to each other and in the cross direction of the web, and each laser acts upon only a portion of the cross directional width of the web, as taught by Balster, in order to cut a moving web in a direction perpendicular to the direction in which the web is moving (column 1, lines 35-38).

Regarding claims 7-9 and 18-20: Imai discloses that the mechanism for supporting the web comprises an air foil (Fig. 1; via while the web is tensioned between rollers 12, air is effecting the web bath); rollers (12); and carrier fabric (via 16).

Regarding claim 10: Imai discloses that the carrier fabric is capable of suspending the web at fixed distance from the laser (Fig. 1).

Regarding claims 11 and 21: Imai discloses that the web includes a cross direction from the first edge to the second edge, whereby the laser is configured to direct the beam of light at an angle that deviates from the cross direction (Figs. 1, 2, and 7; via while cutting a circle H some cuts exists in an angle).

Regarding claim 12: Imai does not disclose a system for perforating a web in the cross direction of the web. However, Balster discloses a similar cutting/perforating apparatus for perforating a web in the cross direction (Fig. 7).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Imai's apparatus for cutting a web by having laser beams for perforating a web in the cross direction, as taught by Balster, in order to cut a moving web in a direction perpendicular to the direction in which the web is moving (column 1, lines 35-38).

Allowable Subject Matter

Claims 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-5 and 7-21 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3721

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is (703) 308-2809. The examiner can normally be reached on Tuesday - Friday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (703) 308-2187. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

ST.


Mickey Yu
Supervisory Patent Examiner
Group 3700